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Packing Transport Handling

OCTOBER, 1951

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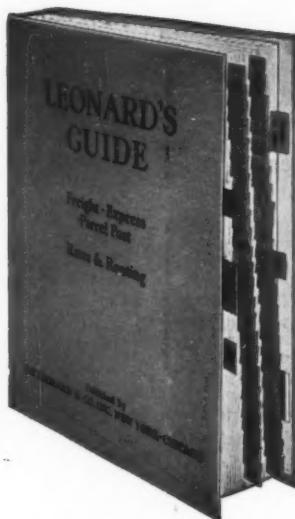


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Memo . . .

TO A SHIPPING DEPARTMENT MANAGER

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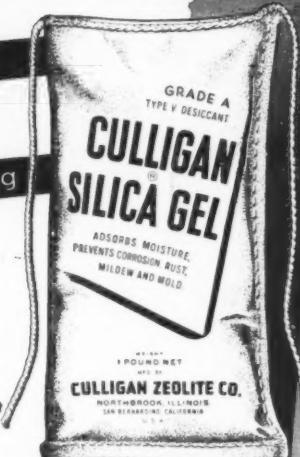
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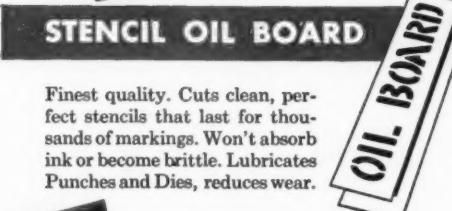
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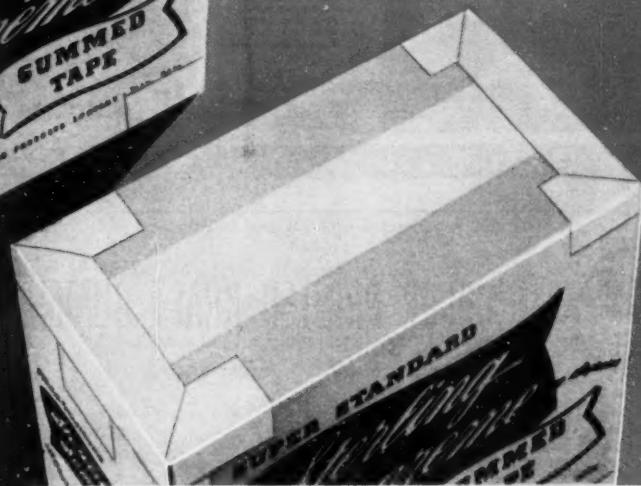
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SHIPPING MANAGEMENT



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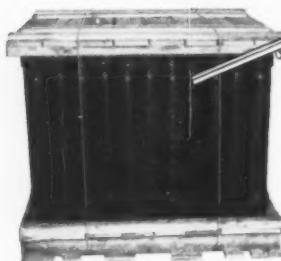
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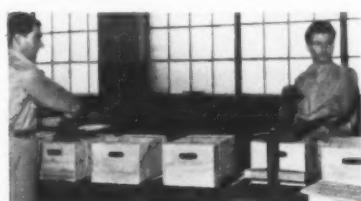
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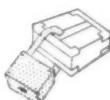


4 COLOR PRINTED KRAFT GUMMED SEALING TAPE



to seal your cartons securely

"ON-TO-STA" kraft sealing tape is packaged in waterproof wrapping paper... to protect its uniform quality



our able and creative staff will prepare art work for a color printed tape to fit your particular needs

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Packing

A Punch.. By S. A.

DC. COOPER Co., Chicago, Illinois, manufacturers of metal cleaning, wax and plastic heating tanks, and a large variety of items utilized in the cleaning, preservation and packaging field, was the successful bidder on a large government contract, involving several million units of military material.

Due to the increasing demand for able-bodied manpower for the military program, and inasmuch as the items covered by the contract were small in size, Mr. Cooper decided to use the services of handicapped personnel exclusively on this contract.

Special machinery was purchased and special jigs were constructed to employ handicapped persons, including mentally sub-normal, cardiac cases, spastics, epileptics and amputees. These handicapped people have been employed without regard for race, color or creed, and Mr. Cooper has found them all eager to make their own way in the world, rather than be on public assistance.

Each person is fitted to a particular job, within the limitations of his handicap and is paid at the same rate for his job as is paid in industry to a non-handicapped person.

Mr. Cooper reports that the contract is being produced and shipped ahead of schedule, and that production by such handicapped personnel is greater than non-handicapped personnel, doing the same type of work, and he feels that he is not only helping these people gain self respect, but is also helping our government and the community in reducing the tax burden, and rehabilitate the handicapped to be of assistance to the government and to the community.

The handicapped workers concerned are employees of Goodwill Industries Inc. an organization which for many years has had the active support of Chicago civic groups, bankers, industrialists, and merchandising executives. The D. C. Cooper work is being produced through arrangement of a subcontract whereby the work is actually turned out by Goodwill Industries, Inc., a non-profit organization.

*

In a move to equalize freight rates according to Export Trade and Shipper, across the nation, the Interstate Commerce Commission has ordered uniform rates on "classified freight" manufactured and processed goods—in all states east of the Rockies.

The eventual effect of the ICC order will be to reduce by as much as 15 per cent freight rates paid by shippers in Southern and Western states, bringing them in line with cheaper freight rates paid by Eastern industries.

The new uniform class rates will have
(Continued on Page 33)



OCTOBER, 1951

Vol. 16, No. 10

CONTENTS

Packing A Punch	11
TM's MUST Do The Almost Impossible by Edward F. Lacey	13
Shock Protection and Cushioning by A. M. Underbill	14
Plant Space Doubled By Fork-Type Power Trucks	16
"Listen, Mr. Traffic Manager" by D. R. Dominie	17
Containers Scientifically Engineered. Result: All Costs Cut by George Ruble	18
New Products & Literature	19
Package Engineer Reporter	20
News Review	21
Traffic Reporter	22
Yours For The Asking	32

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Published 10th of each month by Shipping Management, Inc., 425 Fourth Avenue, New York 16, N. Y. Telephone MUrray Hill 3-6280-1. Western Office, 549 W. Randolph St., Chicago 6, Ill. Telephone 6-5164. Sylvan Hoffman, President; Larry S. Harris, Vice-President. Publication and editorial office, 425 Fourth Avenue, New York, N. Y. Not responsible for safety of manuscripts or pictures.

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Subscription price \$3.00 per year in United States, its possessions and Canada. All other countries, \$4.00 per year. Published in U. S. A.

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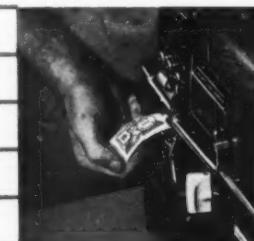
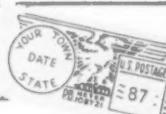
A postage meter *prints* the exact amount of postage needed for any weight or zone—in a single stamp. Plus a postmark, that carries the mailing date. On special tape, delivered wet or dry. One stamp to stick instead of several!

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Shipping MANAGEMENT

FOR SHIPPING AND TRAFFIC EXECUTIVES
425 FOURTH AVENUE, NEW YORK 16, N. Y.

OCTOBER 1951
VOLUME 16
NUMBER 10

TM's MUST Do

The ALMOST Impossible

By EDWARD F. LACEY, Executive Secretary
The National Industrial Traffic League

THE FIELD OF INDUSTRIAL traffic management was never brighter than today, and is offering a real challenge which demands our best efforts. There is great opportunity for the alert traffic manager who has vision and initiative. After all, he occupies a very important position in industry—a position of broad responsibilities,—and it is up to him to sell his services to his executives. On the other hand, executives more and more are depending upon their traffic managers for the efficient and economical distribution of their products, although at times under most trying conditions.

The traffic manager frequently appears before the Interstate Commerce Commission and other Federal as well as state regulatory agencies. At times he appears before Legislative Committees on transportation measures affecting the interests of his company. He must be qualified to express, ably and convincingly, the policy and views of his company with respect to

Speaking on the subject of "A Challenge To Traffic Management" before the Industrial Traffic Management Conference, Department of Transportation & Public Utilities, The University of Tennessee; Mr. Lacey covered exhaustively the major problems facing traffic and shipping executives today.

This is the fourth and last in a series of articles reprinting Mr. Lacey's discussion in its entirety.

transportation. He must be broad-minded, long-suffering and a good listener. He must be patient and understanding, and fair to all, because it is his responsibility to purchase all types of transportation, both passenger and freight, for the interests which he represents. He must have a general knowledge of economics and of transportation law; he should possess the ability to interpret decisions of the courts and of the commissions as they bear upon the transportation problems of his company.

In other words, he should be a sort of superman ready to give intelligent answers to all transportation questions presented to him, and solve the transportation problems of his company; cars and trucks must be acquired for emergency shipments; passenger transportation must be secured on a moment's notice for his executives. His reputation as a "go-getter" is at stake. He must do the *almost impossible*. Well, he usually makes good because of the valuable contacts he has established with his rail, truck and airline friends. After all, that's his job. Like that general of World War II fame—he does the difficult tasks first; then he does the impossible.

Seriously, we must always bear in mind that the public is demanding the products of industry. It is up to our transportation agencies to deliver those goods to the consuming public, but it is the responsibility of

(Continued on Page 27)

Shock Protection and Cushioning

This is an authoritative and up-to-the-minute study of the needs of blocking, bracing, and cushioning, and the types of materials best suited for each in packing and shipping, by a foremost expert in the field.

By A. M. UNDERHILL
Packaging Engineer
General Electric Co.



A. M. Underhill has served as packaging engineer and head of shipping for the meter and instrument division of General Electric since 1931. He began work with General Electric in 1914, leaving to join S. F. Bowser as a methods engineer. Before returning to G. E. in 1927, he was employed as a sales engineer with the Foamite-Childs Corporation.

IN CONSIDERING any packaging or packing problem, it cannot be too strongly emphasized that a knowledge of the mechanical properties of an article is an essential preliminary to a rational design procedure for the package.

The whole purpose in designing for shock protection is to limit the forces which may act on the packaged article.

If we do not know or have some idea as to what values to limit the forces, a rational design procedure cannot be applied and we are reduced to the old cut-and-dry methods currently used.

This then is the first problem and the most important—to know our product, both its weakness and its strength—what abuse it will take and still deliver safely to destination.

The second, and from one point of view, perhaps as important—to know the material available for packaging and packing—what it will do—how it can be applied—and its holding and shock resistance characteristics.

Load-compression curves are of great value as a permanent record of the elasticity values of cushioning materials and reduce a mass of statistics to a simple

Excerpts from an address by A. M. Underhill, Packaging Engineer and Superintendent of Shipping, Meter and Instrument Division, General Electric Company, West Lynn, Massachusetts, given before the Packaging Conference of the American Management Association, New York, at the Atlantic City Auditorium, April 17-19.

and easily read form. As their name implies, they represent the amount of compression or deflection available under increasing loads.

The data necessary to plot such curves can be secured in several ways, such as impact tests, which require equipment and facilities, hydraulic loading, and dead weight loading. The latter method will not give as accurate results, but for general purposes, it is accurate enough.

The following outline of several common cushioning media will give you an idea of the worth and range of the materials covered.

Rubberized products such as latex covered hair and latex covered fibre are extremely effective cushioning materials if and when used properly and within the effective elasticity range of the material.

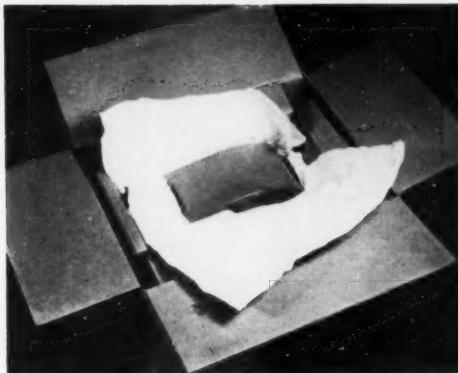
Laboratory tests show that these materials have a static or dead load range of from .035 pounds per square inch minimum up to 1.6 pounds per square inch maximum, depending upon their density and the thickness of the pad. Below this minimum, the material is too dense to give good results, and above this maximum, the loss in depth is too great to leave enough compression to do much good. These figures are not fixed but are only recommended dead loading for most effective results.

For the dynamic or live load, the maximum recommended loading is 16 pounds to the square inch, again depending on the density and the thickness of the selected or required material.

Each individual density and thickness has its own range or load capacity which can be determined by the load compression curve for each sample.

One of the big advantages of these latex covered materials is that they are practically moisture free and moisture resistant and they have practically no permanent set if loaded only to their safe elastic limits.

In one test conducted by the writer, using this kind of material as a cushioning medium, we dropped a pack-up 22 times in the same direction and our G readings only varied from 25 to 30. We repeated the



Shown above is a multiplying machine made by the Clary Multiplier Corporation, San Gabriel, California. It is a fine example of good interior bracing, with creped kraft.

same test with the same material and pack-up the next day with equally good results.

Cellulose wadding of both the built up layer type and the fabricate type—these materials have their greatest application as cushioning for the packaging of very light to medium light articles. They are presently used in packing for many other purposes than cushioning such as filler, absorption of liquids, and to avoid scratching or marring of finishes.

The range of compression loading as a cushion material is as follows:

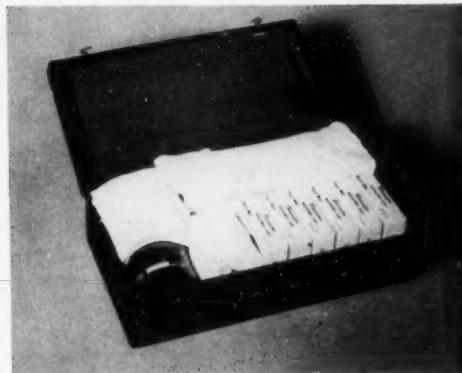
The static or dead load range recommended runs from .025 pounds per square inch to 8 pounds per square inch, again depending on the density and thickness of the pad.

The dynamic or live loading should not exceed 16 pounds per square inch, depending on the density and thickness.

The disadvantage of this type of cushion material is the fact that it has a decided permanent set and will lose a large percentage of its effectiveness under the heavier loads and/or repeated shocks.

Part of this loss can be overcome by a tight pack which will use up a part of the set, but when you do, the range of the effective loading is considerably less.

Moisture is another draw back and must be considered as a factor in anticipating the use of many



Photos on this page courtesy Kimberly-Clark Corp. Here is an example of good blocking. The article packed is called a Fluoretor.

cellulose waddings. However, these cellulose materials are not affected by low temperatures.

Rubber and rubberized products, on the other hand, become somewhat brittle at very low temperatures and lose most of their cushioning value.

Sponge rubber may be and is used as a package cushioning material, and where used properly, is especially effective. Such material can be purchased in practically any desired density from extremely light to very dense.

As there are less expensive commercial cushioning materials which will accomplish satisfactory results, the use of the light density sponge rubber, except for very special applications, is not necessary.

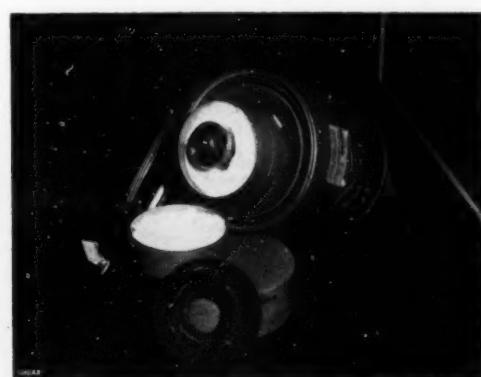
The denser sponge or foam rubber, however, due to its load carrying capacity, is unsurpassed for heavy loads, both static and dynamic, which require shock protection in the low "G" range, say, 100 G's and under.

This denser sponge rubber will support static loads from 0.75 to 14 pounds per square inch and dynamic

(Continued on Page 29)



Courtesy Eimac Corp.
Careful cushioning of Transmitting Tubes.



Courtesy Farnsworth Radio & Television Corp.
Unusual cushioning methods utilized to protect fragile colored television tube.



Left—Fluorescent lamps, which are 8' long, are placed on 48" x 48" wooden pallet until a unit load is built up. The fork truck can then pick up both pallets.

Above—Manual handling of raw material is held to a minimum in the new warehouse. Raw material is palletized on receipt. Held on pallets in storage until ready for production. All work of movement and storage is done by powered industrial trucks. Here covers and wrappers are being transferred by a conveyor line to the second floor level production area.

Plant Space Doubled By Fork-Type Power Trucks

NOT ONLY DID SYLVANIA ELECTRIC PRODUCTS, INC. gain approximately 55 percent in square foot floor area when it erected a new warehouse building at its Danvers, Mass., Plant but, through installation of high-tiering, powered industrial trucks of the fork type, it is able to fully utilize approximately twice the cubic footage formerly available in three outside warehouse locations. At the same time the labor force assigned to material handling and warehousing operations has been reduced by approximately 40 percent. This labor, due to increased production at the Danvers Plant, was readily absorbed by other departments. In addition, despite changes in the type of material manufactured at Danvers, production has steadily increased without necessity of adding to the warehouse force, and without any appreciable increase in the man-hours assigned to material handling operations.

When the new warehouse was occupied early in 1947, the Danvers Plant produced both fluorescent and novelty lamps. Now only fluorescents and sign tubing are produced there. The line requires the storing and handling of some 20 different types and

weights of glass in incoming and shipping operations. All preliminary and final movement of product is by means of powered industrial trucks, either of the hand-led, or the rider type, and material is handled on pallets or in a special type of tote box, used in inter-plant movement. Two sizes of wooden, double-faced, two-way pallets are used. One is 48" x 48", the other 60" x 60". The tote boxes, also of wood and built according to Sylvania's own design, are mounted on pallet skids. Glass tubing is handled in these, with the incoming shipments arriving from Sylvania's Ipswich Plant in carload lots. The hand-led, pallet-handling trucks, bring the boxes from the receiving platform into the warehouse area. There they are handled, and high-tiered, usually three-high, by means of the rider-type fork trucks. When requisitioned, the tier is broken down by the fork truck, and delivery of the box is made by a power, hand-led, truck.

To facilitate the handling and storage operations at Danvers, a fleet of nine powered industrial trucks are used. Three are rider-type fork trucks, each capable of handling a 2,000-lb. load and of tiering to a height

(Continued on Page 24)



"LISTEN,
Mr.
Traffic
Manager"

A TRAFFIC DEPARTMENT is predominantly a service department. Its every effort is aimed at providing service to all other departments within a company and at the least possible cost. Normally the economies afforded by an efficient Traffic Department are the direct results of transportation costs, routings, materials handling and distribution methods. However, there frequently arise situations whereby a Traffic Department can outline a plan or method of operation for another department whereby that other department can do its job more efficiently. One such example of this help is a system outlined and drawn up by the Traffic Department to cut down invoicing and billing time in the Accounting Department.

The normal procedure in processing an order is for the order department to type up the material wanted on a "bill-set" which, if the "snap-out" system is used also provides the invoice copies which are mailed out after the order is shipped. On the IBM system practically the same procedure is followed with the operator pulling out the dealer cards and then repeating the operation after the order has been shipped to make up the invoice copies. Usually all that has to be added to the invoice copies is the method of shipment, date shipped and the postage if shipment went via parcel post. However, adding just these three items means that the entire bill set has to be run through a typewriter for the second time and in the case of IBM the entire set of cards have to be picked out again and rerun through the machine.

It is at this point that the Traffic Department can be of invaluable aid to the Accounting Department. To do so means that the Accounting Department must have, at the time the order is originally entered, all of the billing information which as we have stated previously is, Date shipped, How shipped and Postage.

We will confine ourselves in this example to parcel post shipments. The first two are relatively simple to determine. Once on a set schedule the order department can determine on what day an order will be shipped. It is also fairly simple to determine if shipment will go via parcel post because of the weights involved. However, the difficult factor if a concern ships many items is to determine the postage which must be added to the invoice. However, a Traffic Department can, with thought, devise a chart whereby the Accounting Department can determine the postage of a shipment before shipment is made. Figure A shows, in rough form, how such a

Figure A							
Item A	1	2	3	4	5	6	7
Item A	5	14	19	22	25	30	
Item B	26	28	70	104	130	156	Over 156
Item C	11	22	35	44	55	66	
Item D	10	22	33	45	55	66	Over 66

chart is assembled. The figures opposite each item is the weight of the item in *ounces*. Ounces are used because it gives the operator one unit for computation rather than having to convert and add pounds and ounces together. The parcel post chart (see Figure B) is also converted to ounces.

Figure B							
Parcel Post Rates							
Weight	miles						
In oz.	1	2	3	4	5	6	7
0 oz. to	.14	.14	.14	.14	.14	.14	.14
16	.12	.13	.14	.15	.16	.17	.18
32	.15	.16	.17	.18	.19	.20	.21
48	.17	.19	.20	.21	.22	.23	.24

For simplicity's sake we have not extended the Parcel Post chart and in Figure A have only included the bare essentials which should suffice to show how such a system is evolved. Now let us take an actual example to show how the system can work. A dealer in zone 3 (parcel post zone) places an order for one item A and 2 of item C. The order clerk now adds the ounces which in this case would be 5 and 22 or a total of 27 ounces. The clerk then checks the chart (figure B) and finds that the weight is naturally over 16 ounces but not over 32. Consequently, the postage to zone 3 for 27 ounces would be \$.16.

We might state at this point that in developing the chart for weights of the products that they are weighted slightly to allow for packaging such as the corrugated carton, wrapper, etc. In other words, to the actual net weight of each item is added a few ounces which when the items are taken collectively will allow for the packaging medium. The weighting process is strictly an individual problem and must be tested many times before a good balance is established. In actual practice, however, it must be remembered that any final weight for postal purposes has a tolerance of plus or minus 8 ounces as the charges are based on units of one pound.

Some items are large or bulky and in shipment require packing by themselves. Such an item on our chart is Item D. Whenever this item appears with others, it is rated as a separate package or shipment. Suppose then that a dealer orders 2 of item A, 1 of item C and 1 of item D. The order clerk would rate A and C as one piece and D as another. Carried out this would mean 31 ounces in one package and 10 in the other and if shipped to zone 4 would mean postage of \$.19 and \$.14 or a total postage of \$.33.

Other items, such as Item B may be moderately
(Continued on Page 31)



Utility ventilating sets are bolted to crate bases in the fashion shown at left photo above before being "wrapped up" in their wire-bound crates.

Meticulously engineered crate top, which is cushioned with a protective material, is shown in the center photo being placed

in position. In the photo at right the one-piece wrap-around wirebound mat of the shipping crate has been partly folded into shape and is here being placed in position around the vertical fin heater to form a secure pressure pack that will hold the unit firmly in place during handling and shipping.

Containers Scientifically Engineered Result: All Costs Cut

By GEORGE RUBLE
American Blower Company

SCIENTIFIC ENGINEERING of shipping containers is returning impressive dividends to our company through notable economies in man-time, factory space required for crating, shipping weights, and over-all packing costs.

These economies range up to nearly 80 percent in man-time savings, over 50 percent in over-all packing costs, and over 60 percent in shipping weights.

We believe our experience is concrete proof that the packaging engineer's drawing board, plus close cooperation with engineers representing crate manufacturers, is the soundest and most intelligent approach towards solving packing-for-shipment problems.

Of course, team work between the packing engineer, the purchasing department, the crating department, the quality control department, and others is essential to the success of any successful such program—and we have plenty of such team work here at the American Blower Co.

As a result of our never-ending search for better and more economical ways to pack our Venturafin heaters

and utility ventilating sets for shipment, we found ourselves in an enviable position in the packing department upon entering the period of national defense preparations because of converting to the use of scientifically engineered wirebound crates.

As compared to our former method of packing Venturafin heaters and utility ventilating sets in crates that we made ourselves, our economies since the conversion to wirebound crates range up to nearly 80 percent in man-time required for packing and over 50 percent in over-all packing costs. Furthermore, we have reduced shipping weights up to more than 60 percent!

Our conversion from closed cartons to open wirebound crates for shipping Ventura fans also brought appreciable economies in man-time and over-all packing costs, although our original container costs were more than doubled! Of greatest importance, though, in packing this item in wirebound crates was the complete elimination of hidden damage, which had resulted in 26

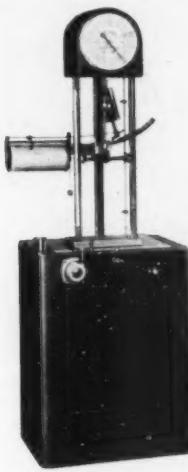
(Continued on Page 26)

NEW PRODUCTS & LITERATURE



IMPROVED UNIVERSAL TESTER

Since their first announcement of the Dillon Low-Range Tester some years ago, have been added a number of worthwhile improvements that will be of interest. These include:



a. 0-300 pound scale which is suitable for testing heavier materials than heretofore. Top range previously has been 0-100 pounds.

b. A vastly improved motor drive is now standard equipment. This assures full torque up to 300 pounds direct loading and with stepless speed control operable from 0" up to 20" per minute.

c. A solid shaft now connects the speed control to the motor transmission. This eliminates the former flexible shaft and makes possible a far more positive and accurate setting of speeds without danger of overruns.

d. The quadrant arm is now one continuous casting affording greater rigidity and consequently smoother autographic stress-strain curves.

e. The speed control dial is now mounted on top of the tester base instead of on the front of the machine. This makes for greater ease in reading and adjusting settings.

LIGHTWEIGHT SHELF-TYPE TRUCK

A light duty truck with smooth steel shelves is being manufactured by the Materials Handling Division of the Market Forge Company.

These trucks can be built to meet individual requirements. They are furnished with any size or type of caster

and wheel. The lips of the shelves can be supplied turned up or turned down, a feature that makes this truck especially useful for handling various types of material.

MARKING TRUCK LANES VIA NEW METHOD

A new method for marking trucking lane and safety area stripes on the floors of industrial plants and warehouses, was announced this month by Minnesota Mining and Manufacturing Co.



Tests show that the new method—using "Scotch" brand plastic film tape No. 471—will outwear other sprayable or brushable striping materials five times longer, the producer pointed out.

The tape can be applied by a firm's own maintenance men, without loss of employee or trucking time in the taped-off areas, the 3M company said.

Other advantages for the new method are:

1. Resistance of the tape to acids, alkalies, water, salt water, alcohol, and hydro-carbons such as gasoline and kerosene.

2. Reduced costs due to speed and simplicity of application.

3. Ability to alter marked-off areas without leaving traces of the former stripe.

4. Extreme ease with which damaged areas can be repaired or replaced.

Literature and prices of products mentioned can be obtained if you drop a post card to Richard Gertner, News Editor, SHIPPING MANAGEMENT, 425 Fourth Ave., New York 16, N. Y.

Companies having new product stories should send them to the same address.

5. Lack of floor ridge, due to tape's thinness (4 mils).

6. Tape's pressure-sensitive adhesive grips immediately upon contact.

7. Seven colors to help identify specific floor areas such as red for danger areas, canary yellow for safety zones, etc. Other colors include white, orange, blue, green, brown and black.

The tape is available nationally from paper, mill supply and hardware jobbers, in 2-, 3-, and 4-inch widths on 36 yard rolls, the company explained.

HAND TRUCK LIFT ATTACHMENT

Safety and economy are promoted by means of a new exclusive Fairbanks attachment for two wheel, steel-framed, hand trucks. This new safety device is a product of The Fairbanks Co.



The Saf-T-Lifter is recommended for use in warehouses, shipping rooms and other locations where it is frequently necessary to lift bulky packages off the floor in order to load them on a dolly, strap them or bring them to an upright position.

Heretofore, in any of these operations it was necessary to employ two men with either a pry bar or hose truck, one to pick up and hold the load off the floor while the other accomplished the necessary work.

A careless slip or moment of inattention by the one holding the load could release the package to the floor, oftentimes resulting in serious injury to his partner. (Continued on Page 22)

Package Engineer Reporter

Forum On Military Packaging Features Eastern Meeting

AN INFORMAL OPEN FORUM on problems related to military packaging was the feature discussion of the Initial Fall Dinner Meeting of the Eastern Division, Society of Industrial Packaging and Materials Handling Engineers. The annual election of officers took place at the meeting, held at the Brass Rail Restaurant, in New York City.



An informal photo of most of the members of the Executive Board, Eastern Division, SIPMHE for the year 1951-52. Seated left to right, Messrs. Bob Anderson, Paul Paulsen (President), Frank Cohen; Standing left to right, Glenn Mather, Nat Scher, Jim Noble, Jerry Gould.

Frank Cohen, Secretary of the organization, chaired the forum with the opening remarks: "Every cent you save uncle Sam you save yourself through less taxes." Arthur Hunnerman of the U. S. Signal Corps. then addressed the group on the way his Service is facing packaging and re-packaging problems, Herbert Terhune discussed similar problems in the Corps of Engineers, and Lieut. Howard N. Blitman told how the Chemical Warfare Service handles its knotty packaging problems. Frank Cohen, who has been teaching at the Rossford Ordnance Depot, then told how widely volatile corrosion inhibitors are being used in military packaging.

It was announced at the meeting that through the energetic efforts of various members of the Eastern Division, a course in Package Engineering is being given this Fall at Columbia University. Of 11 speakers who will be heard at the course sessions 8 are members of SIPMHE. Subjects to be discussed include: "Shipping Containers and Exterior Packing" (Glenn Mather); "Testing Techniques and Cushioning Materials" (Earl

R. Stivers and Paul H. Paulsen); "Preservation," (Frank Cohen), "Packaging of Heavy Equipment" (Major Frank W. Green). Many other packaging phases and problems are included in the schedule.



Bob Anderson of Sperry Gyroscope addresses the group on military packaging as Captain Paul Paulsen, left, and Frank Cohen, right, listen intently.

Officers elected at the meeting for the coming year include: President, Paul H. Paulsen; Regional Vice President, Robert G. Anderson; Vice President, Packaging, Walter J. Byrd; Vice President, Materials Handling, Vincent J. Reade; Vice President, Transportation, Glenn Mather; Secretary, Frank Cohen; Treasurer, Nathan Scher; Directors for 2 Years: Jerome F. Gould and James N. Noble.

Philly Div. Sees Paul Vogt's Slides On GE Packing

THE FIRST REGULAR MEETING of the Fall season of the Philadelphia Regional Division, S. I. P. M. H. E., was held Monday evening, September 24, 1951, at Kugler's Restaurant. Sixty-five members and guests were in attendance.

Mr. Herbert M. Lapidus, President of the local Division, presided at the dinner, and announced his early removal to a new position with the Navy Department in Washington, D. C. For the balance of this year, the position of President will be filled by the present Executive Vice-President, Mr. F. Robert Campbell, of the Armstrong Cork Co., Lancaster, Pa.

Mr. Lapidus presented to the assembled diners the
(Continued on Page 26)

U. S. C OF C OUTLINES PLAN TO MEET FREIGHT CAR SHORTAGE

◆ The Chamber of Commerce of the United States has outlined measures for meeting an expected stringent freight car shortage. The proposed steps are presented in an illustrated pamphlet issued by its Transportation and Communication Department under the title, "Stretching the Freight Car Supply." The pamphlet will be widely distributed.

It told both shippers and carriers what must be done to make more cars available through efficiency in handling them, since new cars cannot be built fast enough to meet the need for car space.

Here is what shippers are asked to do:

Load cars fully.
Load, bill and unload promptly.
Load and unload six days a week.
Use no cars for storage.
Clean cars before releasing.
Try to load cars in the direction of owners' lines.

Carriers, said the Chamber, must:

Spot and pull cars promptly.
Speed up terminal and line-haul operations.
Distribute car supply efficiently.
Avoid accumulation of cars.
Repair bad-order cars promptly.
Give maximum six-day service.

Unless such steps are taken, the Chamber said, the present shortage of approximately 20,000 cars a day will increase with the fall pick-up in freight traffic. The situation at the moment is holding about even, the Chamber pointed out. Construction of new cars is hampered by material shortages, which do not show promise, said the Chamber, of being corrected.

18TH ANNUAL CONVENTION OF ATA TO MEET IN CHICAGO, OCT. 22-26

◆ Plans for the 18th annual convention of the American Trucking Associations, Inc., moved toward completion with announcement by John V. Lawrence, managing director of the association, that three nationally-known figures would address delegates to the meeting at the Stevens Hotel, Chicago, October 22-26. They are:

Dechard A. Hulcy, president of the U. S. Chamber of Commerce, who will address a general luncheon meeting Thursday, October 25.

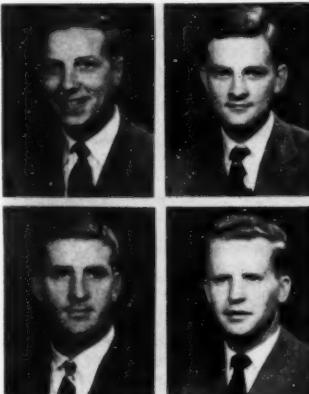
James A. Knudson, Defense Transport Administrator and member of the Interstate Commerce Commission, who will address the association's Board of Directors Thursday afternoon, October 25.

Dr. Kenneth McFarland, educational director of the association, educational consultant for General Motors Corporation and guest lecturer for Reader's Digest.

magazine, who will address the general luncheon Friday, October 26.

5 SALES REPS. APPOINTED BY KIMBERLY-CLARK

◆ The following appointments of sales representatives for Kimpak protective cushioning and other industrial creped wadding products have been announced by A. G. Sharp, General Sales Manager, Kimberly-Clark Corporation, Neenah, Wisconsin:



Upper left, Jacob O. Fritz, top right, William W. Stodghill; lower left, William E. Cozens, lower right, Richard S. Pauli.



RAYMOND J. MILLER

Raymond J. Miller, formerly of the Market Research Division, has been assigned, effective September 1st, to Territory 2 in District II, comprising most of Ohio and parts of Pennsylvania and West Virginia. He will make his headquarters in Cleveland. Before joining Kimberly-Clark in 1945, Miller spent 56 months in the U. S. Army Air Force in the South Pacific Theater, and holds the rank of Captain. He is a graduate of Lawrence College.

William E. Cozens has been assigned to New York City, and Richard S. Pauli to Boston; with headquarters at the

Corporation's New York office, 250 Park Avenue.

Cozens is a graduate of the University of Pennsylvania, where he majored in industrial and personnel relations, following 33 months in the U. S. Army. Pauli is a graduate of Massachusetts Institute of Technology, where he majored in chemical engineering and marine transportation. Pauli served 39 months in the U. S. Merchant Marine during World War II.

Jacob O. Fritz has been assigned to St. Louis with headquarters at the Corporation's Atlanta office, 22 Marietta St., N. W., and William W. Stodghill has been assigned to Cincinnati with headquarters at the Corporation's Chicago office, 8 So. Michigan Avenue.

Fritz is a graduate of the University of Wisconsin, where he majored in marketing and merchandising, following 35 months' service in the U. S. Army.

Stodghill is a graduate of Yale University, where he majored in mathematics, following 11 months' service in the U. S. Army.

DR. PEDERSON HEADS STABILITY DIV. FOOD AND CONTAINER INST.

◆ Dr. Carl S. Pederson has been appointed to the headship of the Stability Division of the QM Food and Container Institute for the Armed Forces succeeding Dr. Harry Fevold, former head, now with the Baxter organization. In joining the Institute staff, Dr. Pederson left a long association with the New York State Agricultural Experiment Station of Cornell University, Geneva, N. Y., where he held a professorship in bacteriology. He began with Cornell in 1925 as a research instructor in bacteriology, having received his B.S. and M.S. degrees in biochemistry from the University of Wisconsin. In 1929, he received his Ph.D. in bacteriology from Cornell.

SIXTH ANNUAL MEETING FOREST PRODUCTS RESEARCH SOCIETY SET FOR LATE JUNE, 1952

◆ The Forest Products Research Society has announced the location and dates for its 6th Annual National Meeting to be held in Milwaukee, Wisconsin, June 23, 24 and 25, 1952. Upwards of 1,000 persons are expected to be in attendance at the program which will include presentation of technical papers on a wide range of forest products subjects, as well as visits to nearby wood utilization and wood supplying plants.

The Forest Products Research Society is a semi-technical organization of 2,300 persons throughout the world who are engaged in or are interested in forest products research, development, production, utilization and distribution. Its

activities are carried on through an organization of 11 geographic Sections throughout the United States, with national headquarters at Madison, Wisconsin. Its previous National Meeting and Industry Show was held at Convention Hall, Philadelphia, in May, 1951, with 2,300 persons in attendance.

Officers and Board members of the Society include:

President, Roy M. Carter, Professor, School of Forestry, North Carolina State College, Raleigh, North Carolina.

President-Elect, Kenneth G. Chesley, Director of Research, Crossett Lumber Company, Crossett, Arkansas.

Vice President, Robert D. Pauley, Manager, Development Center, Weyerhaeuser Timber Company, Longview, Washington.

TRADE PROMOTION OFFICE OP. ED BY PORT AUTHORITY IN BRAZIL

♦ Joseph M. Byrne Jr., vice chairman of The Port of New York Authority announced last night the establishment by the Port Authority of a New Jersey-New York port trade promotion office in Rio de Janeiro, Brazil. At the same time, Mr. Byrne announced the appointment of Robert L. Mills Jr., of Rio, as manager of the Authority's Latin American office which is expected to open on November 15.

The Brazil office is the fourth of its kind to be established by the bi-state agency to help promote the movement of world commerce through the Port of New York. The first of these, the Chicago office, was opened in October 1945, and the second and third in Cleveland and Washington in 1948.

"The Port of New York is the greatest natural asset of the States of New Jersey and New York," commissioner Byrne said. "Under the obligations of the Port Treaty of 1921 the Port Authority has followed an aggressive port promotion and protection program to assure the continuance of our port's prominence. Under the direction of our Director of Port Development, Walter P. Heddle, we carry on an ever-accelerating program in the interest of the continuing prosperity of the people of the whole Port District, where one out of every ten persons gainfully employed in the New Jersey-New York Port District is directly or indirectly dependent upon the Port for his livelihood.

RAILWAY EXPRESS AGENCY STARTS DRIVE AGAINST LOSS AND DAMAGE

♦ Spurred by the great need for conserving important materials and supplies required for the national defense program, Railway Express Agency has embarked upon an intensive drive to reduce loss and damage to express shipments, the company announced today.

The program calls for frequent meetings of employees, intensive study of express operations and of the causes for loss and damage claims. Enthusiasm in the program will be maintained through monthly posters, slogans, and competitive scoring which will indicate the current leaders in each department and division of the company.

The initial slogan sparking the drive

is "Handle The Right Way—Prevent Claims," which will appear on all bulletin boards, internal correspondence, will be publicized in the company publication, and in other ways.

17-MAN BOARD FOR PLANT

JAN. 14-17, 1952

♦ Seventeen industry executives, representing major sections of the plant maintenance field, will serve as an advisory board for the Plant Maintenance Show to be held at Convention Hall, Philadelphia, Jan. 14-17, it was announced by Clapp & Poliak, Inc., the exposition management.

L. C. Morrow, consulting editor, "Factory Management and Maintenance," New York, is chairman. Members of the board are D. F. Beard, director of advertising, Reynolds Metal Co., Louisville, Ky.; B. E. Boyd, vice-president, Owens-Corning Fiberglas Corp., Toledo, O.; J. K. Byrne, sales manager, Complete-Reading Electric Co., Inc., Chicago; C. J. Copley, advertising department, Socony-Vacuum Oil Co., Inc., New York; S. W. Corbin, assistant manager, industrial divisions, General Electric Co., Schenectady, N. Y.; Howard F. Eastwood, vice-president and secretary, Barreled Sunlight Paint Co., Providence, R. I.; William Flatow, Jr., assistant to general sales manager, West Disinfecting Co., Long Island City, N. Y.; Orville C. Hognander, vice-president and sales manager, G. H. Tennant Co., Minneapolis.

Also, Walter Maguire, president, Walter Maguire Co., Inc., New York; H. R. Meyer, manager, maintenance sales department, Westinghouse Electric Corp., Pittsburgh; D. C. Miner, advertising manager, E. F. Houghton & Co., Philadelphia; W. L. Parcell, sales manager, Ridge Tool Co., Elyria, O.; C. F. Radley, director of publicity, Oakite Products, Inc., New York; Francis S. Russell, president, RCS Tool Sales Corp., Joliet, Ill.; Stuart C. Sommer, advertising manager, James G. Biddle Co., Philadelphia, and C. Swoboda, manager, industrial division, McCaskey Register Co., New York.

Concurrently with the show, a Conference on Plant Maintenance will be held. Advance registration cards and hotel accommodations may be obtained from Clapp & Poliak, Inc., 341 Madison Ave., New York 17, N. Y.

working under the package. Now, one man can pry up the package with this nose truck, push the handle forward to the locked position and then complete his work on the package. The load will be safely and securely supported in the raised position.

Another advantage of a nose truck fitted with the attachment lies in the fact that while a pry bar is designed for heavier loads the nose truck will lift the package higher, facilitating the work under the package.

★ TRAFFIC REPORTER ★

The Nassau-Suffolk Traffic Club held the first meeting of the season at the Trott Inn located in Carle Place, Nassau County, New York, Sept. 27th.

Featured speaker of the evening was W. R. Draper, Jr., Trustee of the Long Island Railr oad, spoke on the industrial development of the Nassau-Suffolk area

★ ★ ★

The New Challenge To Motor Transport" was the title of an address given by Hal Chaille, Sales Manager of the Los Angeles Branch of the Fruehauf Company, on September 24th, before The Los Angeles Transportation Club, Inc. in the Continental Room of the Alexandria Hotel.

★ ★ ★

The Women's Traffic and Transportation Club of Baltimore, Maryland, has moved its club headquarters to The Marling House, for the 1951-'52 season.

★ ★ ★

Progress by women workers in American Industry over the past fifty years was the theme of an address by R. J. Morfa, chairman of the board, Missouri-Kansas-Texas Lines, at a meeting of the newly-organized Women's Traffic Club of Houston, held at the Houston Club, Sept. 17th.

★ ★ ★

P. Steele Labagh has been appointed Traffic Director of California Packing Corporation, succeeding the late Irving F. Lyons who died in a plane crash on August 24th.

★ ★ ★

The Annual Outing, an all day affair sponsored at The Metropolitan Traffic Association of New York, was held at Schuetzen Park, North Bergen, New Jersey on September 15th, 1951.

★ ★ ★

The Annual Installation Program of the Women's Traffic and Transportation Club of New Orleans, held Sept. 13, featured R. J. Morfa, chairman of the Board, Katy RR, as principal speaker.

New Products

(Continued from Page 19)

FREE MATERIALS HANDLING BOOK

A 21 page booklet titled "The How Book of Cost Cutting Materials Handling" is now available from the Yale & Towne Manufacturing Company. A revised edition of a previous booklet printed in 1947, the "How Book" was prepared under the guidance of Dr. V. S. Karabasz, Professor of Industrial Management, Wharton School, University of Pennsylvania.

A large portion of the "How Book" is concerned with basic background material

Growth of Trucking Industry Described By ATA Exec.

In tracing the rapid growth and importance of the U. S. Trucking industry, an official of the American Trucking Associations, Inc., stated recently that the present high level of truck service could be maintained only by achieving the following:

1. Better streets and highways to handle present and future vehicle movement;
2. elimination of artificial restraints on the industry;
3. honest competition, and
4. greater coordination between the different modes of transport.

Peter T. Beardsley of ATA's law department, in a speech here before the Traffic Club of Kansas City, termed America's 8,600,000 trucks "an unreckoned asset," whose importance to the nation's well-being and safety is not yet fully appreciated by large segment of the public.

These vehicles, he said, carry "more than two-thirds of America's freight tonnage at one time or another," and according to latest Automobile Manufacturer's Association figures, carry more tonnage than all other forms of transportation combined.

Trucks are playing an important role in the current preparedness program, he said. "Trucks can run to and from any point of production and distribution," Mr. Beardsley pointed out. "Today a man can open a factory anywhere he chooses so long as he is on an

covering types of skids, pallets and other industrial handling tools. Most of the balance covers a comprehensive plan for evaluating present handling methods through an engineering analysis much like a time and motion study.

Enclosed in the book are several charts and summary sheets for making a materials handling analysis. More sheets are available.

NEW PAPER SHREDDER

Designed to provide a fresh, clean, rapid source of resilient packing material, these compact, portable Marvel Paper Shredders offer many advantages to shipping departments: The freshly cut paper possesses up to 3 times more volume than



baled paper, saves weight and postage, and offers better protection to product.

Cleanliness also is more easily controlled. The machines produce at high speed, filling normal shipping room requirements in a few moments of operation. Papers

alley, a street or a highway. At once he is on the main line to every other business or agricultural enterprise in the whole nation. Truck transport makes that possible."

"It is an asset which conceivably can be the key to the successful defense of this country . . . You can't

(Continued on Page 29)

Unusual Machine That "Dials" Tape Lengths Shown In Photo



Although shown at the AMA Convention last Spring, this is the first time a photograph has been released of the new and unusual Marsh Electric Dial-Taper. In one operation, the machine measures the tape, cuts it off, and moistens it with warm water.

WIRE SPOOL ADAPTER

This new spool is claimed to convert any type of stitching machine, (Automatic, Manual, Seam, Bottom, Metal, Sword or Straight Arm models), to use 25 lb. coils. More important, however, is



that it maintains accurate control of the wire every second the stitcher is operating. It guides and feeds the wire in a smooth, steady flow to the stitching head, preventing "jam-ups" within the head, kinks or snarls and other costly delays.

It is said that a brake is synchronized to release only the amount of wire required for each stitch without dangerous slack or over-run. The Inland Wire Spool is easily mounted on your present machine. The 25 lb. coil of wire is then quickly inserted by simply removing the flange of the spool.

(Other New Products on Page 33)

NOW... soft, resilient
PAD-PAK

**Extra Protection
for Your Products in Transit**



A TV cabinet is often the most looked-at piece of furniture in the home. That's why the original beauty of so many sets is protected from damage in transit by Pad-Pak.

Here is the ideal protective packing. Made of cotton wadding, Pad-Pak has resilience to absorb impact . . . to protect against scratches and rub marks. Glazed outer surface gives extra body, greater ease in handling, and permits accurate cutting to any shape.

But safeguarding cabinets in shipment is only the beginning of a long list of Pad-Pak uses. Any item subject to breakage or marring—from perfume bottles to polished metal parts — reaches its destination undamaged when cushioned with this extra soft, resilient material.

Ask for samples of Pad-Pak, stating your choice of thickness — from $\frac{1}{8}$ to $\frac{1}{2}$ inch. Write Dept. S10.

IMMEDIATE DELIVERY

UNION WADDING CO.

Pawtucket, Rhode Island
SINCE 1886



Fork-Trucks Double Space

(Continued from Page 16)

of nine feet. The other six trucks are the hand-led type, there being three each of the pallet-handling, and the pallet-stacking type.

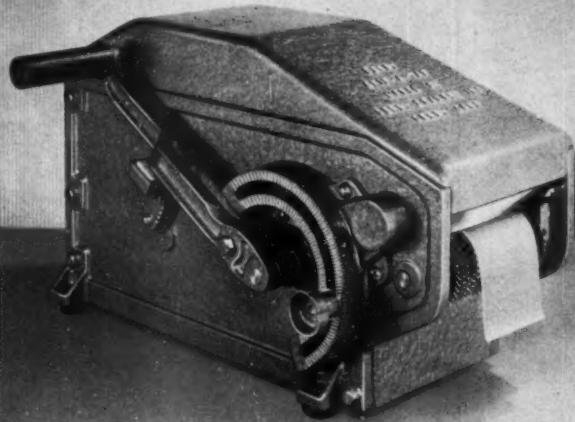
Considerable use is made, in various parts of the warehouse, of steel racks for storage of pallet-loads. This rack system is to be enlarged to permit the better storage of partial pallet-loads in the order-filling area. The move has a dual purpose, one to permit installation of a perpetual inventory system, the other to move the partial pallet-loads from the floor and move them out of the way, vertically. Considerable more savings are expected to be derived from this new installation, it was said by Richard Y. Ingraham, Supervisor of Production Control, who is in charge of the material handling system.

Sign tubing is the principal item stored on the steel racks, this being because this type of tubing is too heavy to permit pallet loads being stacked one on another. A typical pallet load of sign tubing contains anywhere from 48 to 50 cartons.

An interesting technique of handling, developed at the Danvers Plant, is the use of two 48" x 48" pallets, positioned side by side. Cartons containing Sylvania's eight-foot fluorescent lamps are placed on these, with anywhere from 40 to 72 cartons constituting a single load. It is not necessary to change the spacing of the forks when such unit loads are handled, the powered industrial truck operator directing the truck's forks one in the left-hand opening of one pallet, and one in the right-hand opening of the other pallet. The weight of the cartons, the layers of which span the two pallets lengthwise, prevents them from "buckling" when lift is applied.

Transfer of raw material into production, and of finished product to the outbound section of the warehouse, is made by means of a conveyor. The belt rises to ceiling height then—in a covered passage-way—crosses the yard area at the plant some thirty feet between the warehouse and the production department. Pallet-loads of cartoned material for fluorescent lamps are placed at the feeder end of the conveyor and the cartons manually loaded on the belt. As stated, finished product is returned at the opposite end of the conveyor belt, the cartons being removed manually and built into pallet-loads for handling either by the powered, hand-led, or rider-type pallet-handling trucks. In outward shipment the smaller pallet-handling and tiering trucks, are used to move loads into box cars, where the material is manually stowed, or into over-the-road trucks for interplant shipment.

In addition to supplies of glass tubing, other material received from suppliers consists of tube wrappers, spacers, tube cartons and similar paper products. Also cartons of tube ends and similar sundries. All these items are manually palletized at the plant, but thereafter handling is by means of the powered industrial trucks.



Derby GRIP-A-TAB Model 82 takes tapes up to 4" wide; delivers pre-determined lengths of practically all tapes.

Resourcefulness, skill and craftsmanship were required to engineer into the Derby GRIP-A-TAB EIGHTY Series, the new features called for by over 300 different kinds of Pressure-Sensitive tapes. Experience and judgment were called for to choose safely such radically new features as the following:

- An Expanding-Spring-Clutch feed mechanism — a safety measure up to now unequalled in any other tape dispenser.
- An interchangeable gear train using gears large enough and strong enough to drag stubborn tapes up to 4" wide, without injury to the mechanism. Derby does not use narrow, pinion-like gears to do a man's job.
- Replaceable, razor-type cutting blade made of the finest surgical steel to handle any type of tape continuously — not a clumsy, "re-sharpenable" blade which practically no one can re-sharpen and which dulls after a few hours' use on many tough tapes, such as cloth, glass, plastic and filament.

Each of these features, original and exclusive with Derby, is responsible for the unprecedented success of the EIGHTY Series, and was adopted only after other cheaper constructions had been tried and discarded.



Illustrated above is an installation of Derby 82's in use at the Fuller Brush Company over a year without a single call for service.

Now, after more than a year, no imitators have been able to equal the skill, resourcefulness and craftsmanship which Derby displayed in pioneering its GRIP-A-TAB EIGHTY Series. Naturally, Derby GRIP-A-TAB costs a little more, but, after all . . .

THERE IS NO SUBSTITUTE FOR THE ECONOMY OF QUALITY.



DERBY SEALERS, INC.

GRIP-A-TAB DIVISION • DERBY, CONNECTICUT

Write for brochure illustrating the more than 40 Grip-A-Tabs now available.

How Can I Solve My LABELING PROBLEM?



**"WITH GLUE-FAST LABEL GLUERS
AND GLUES OF COURSE!"**

Save 35% Time

ELIMINATE SLOW - MESSY GLUE POTS AND BRUSHES

- Low initial cost . . . no upkeep . . . trouble free
- Speeds up labeling . . . cheaper operation . . . cleaner labeling
- More uniform labeling makes neater appearing packages
- Used for applying glue to labels for cartons; bottles; cans

Hand operated models - 6" - 7" and 12" size
FREE! Order your 6-inch **LABEL GLUER**
 for 10-day **FREE TRIAL**

GLUE-FAST EQUIPMENT CO.

11-M WHITE STREET

NEW YORK 13, N. Y.

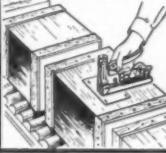
1001 Uses HANSEN TACKERS



SEALING BAGS



TAGGING BOXES



Shippers find that the versatile Hansen Tacker saves minutes and cents on every item for shipment or warehouse.

The Hansen drives stout staples securely into the wood of shipping cases as fast as you can squeeze the grip. Compound leverage and a compression spring do the work for you—and drive home each staple with a measured triphammer blow.

Each Hansen Tacker holds scores of staples, and takes but a moment to reload. There are economical Hansen models for every type of operation, including self-clinching staplers for sealing bags, assembling cartons, etc.

ASK FOR FREE FOLDER

A. L. HANSEN MFG. CO.

5027 RAVENSWOOD AVE., CHICAGO 40, ILL.

Containers Scientifically Engineered

(Continued from Page 18)

rejections of Ventura fans from one shipment of 27 units!

Our dividend-paying packing reforms came about late in 1949 after thorough laboratory and shipping tests of wirebound crates that had been designed and perfected through close cooperation between the package engineering department of American Blower Co. and wirebound shipping container engineers. At all times, we kept in mind and had the advice of Purchasing, Crating, and Quality Control so that our end results meet all their individual requirements.

By the conversion to the use of wirebound crates for these three items in many different sizes and models, Purchasing was able to cut original container costs, Crating was able to ring up impressive economies, and Quality Control carried out its function to the ultimate delivery of the product.

Comparative figures show how all interested departments benefited from scientific package engineering that resulted in the adoption of wirebound shipping containers for Venturafin heaters and American Blower utility sets. Here are the figures:

Item	Shipping (In Pounds)	Packing (Man-Minutes)	Packing (Over-All Costs)
Former	Now	Former	Now
No. 1. Venturafin Vertical Heater	214	170	43
No. 2. Venturafin Vertical Heater	364	285	70
No. 3. Venturafin Vertical Heater	364	285	67
No. 1. Venturafin Horizontal Heater	214	170	70
No. 3. Utility Set	403	300	79
No. 5.	220	155	67
Former	Now	Former	Now

In addition to these economies, we have evidence that the wirebound containers are much preferred by the receivers of our products because of the ease with which the wire loop fasteners of the crate can be unfastened, the better appearance of the crated units, and the complete elimination of all hidden shipping damage to Ventura fans, which had been a frequent and costly occurrence with closed cartons.

Package Engineer Reporter

(Continued from Page 20)

present national candidate for position of Secretary of the Society, Mr. Alvin S. "Cy" Roberts, whose name appears on the national ballots. Mr. Roberts spoke briefly of the coming Exposition in Cleveland, and of the Packaging Competition of which he is acting as Chairman.

Following the dinner, the members and guests adjourned to a neighboring room where a screen had been set up, and where very interesting slides of packing designed for the General Electric Co. were shown by the man in charge of packaging for the Apparatus Division, General Electric Co., Schenectady, New

York, Mr. Paul Vogt, the Speaker of the evening, and a Vice-Chairman of the Society.

Mr. Vogt prefaced his remarks by sketching how the Society grew from the actions of seven men, of whom he was one, in Chicago some six years ago. He then explained the vital importance of packaging and packing in General Electric operations (close to ten millions having been spent by the company nation wide in one year for fiberboard alone), and how vital savings in losses through damaged shipments were being effected by stream-lined methods. The details shown gave the gathering an excellent picture of how big industry makes inter-plant shipments of vital parts of both rugged and fragile natures.

It was announced that the October meeting of the Philadelphia Regional Division will be held in approximately four weeks, after the coming Cleveland show, at the MLA Club on Walnut Street, and would have a number of speakers in a symposium on the Exposition.

AMH Soc., N. J. Branch, Hears Account of Gov't Packing Lab.

MR. JAMES A. SARGENT, CHIEF, Packaging Development Branch, Corps of Engineers, Fort Belvoir, Virginia, spoke on "Shock and Vibrations Studies At The Packaging Development Laboratory, Fort Belvoir, Virginia," at the September 19th meeting of the New Jersey Chapter, American Material Handling Society, held at the Military Park Hotel, Park Place, Newark, New Jersey.

Mr. Sargent explained the need as well as the problems arising from lack of standardization of testing procedures in military and industrial packaging laboratories and the effects and relationship of design with efficient material handling, warehousing and shipping operations.

Because this subject has such widespread interest dealing with the relationship of packaging with materials handling, warehousing and shipping, this meeting has been designated "Bosses Night"—so—invite your boss to come with you.

TM's MUST Do The ALMOST Impossible

(Continued from Page 13)

the industrial traffic manager to select the best type of transportation which will insure prompt and speedy delivery of those goods. Old ways give way to new—the hands of progress cannot be stayed.

The demands upon the traffic manager are ever-increasing, but I believe that our industrial traffic men of today are capable and qualified to perform the many responsibilities which are placed upon them. They have a wonderful future ahead of them, and I am confident they will meet the challenge to the fullest extent.

The average tractive effort of locomotives now being installed in service is approximately 65 percent greater than it was 30 years ago.

TURN "WASTE" INTO PROFIT

Shred NEWS, MAGAZINES, OLD FILES
into excellent shredded paper



The famous "Silver 10" paper shredder makes a first class packing material at amazing speed for its low cost. Write today for complete details including information on the FREE TRIAL.

INDUSTRIAL SHREDDER & CUTTER CO.
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METZGAR "LIVE ROLLER" Power Unit



FOR HORIZONTAL
POWER APPLICATION
IN CONVEYOR AND
PRODUCTION LINES

Metzgar "Live-Roller" Power Units offer a wear-resisting metal transmission surface that outlasts belt type units many times over for handling hot or sharp edged articles.

They are offered in various lengths and are readily adjustable for height.

Rollers may be specified for any spacing (1 to 5 rollers per foot) either above or below the channel frame.

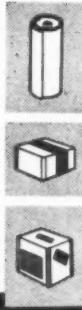
For economy in power units, your best buy is a Metzgar.

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11½", 15", 18", 24"
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BALL-BEARING
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MORE DURABLE
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PENNSYLVANIA

POTDEVIN LABEL PASTERS



Shipping Departments need not be a bottleneck if you have a POTDEVIN to do ALL the gluing jobs . . . labeling, wrapping and packaging. Gluing with POTDEVINS is faster and more economical than pre-gummed labels or tape. Four sizes are available—6, 8½, 12 and 18" widths—hand or motor driven. POTDEVIN patented glue regulator controls the exact amount of adhesive without oozing at the edges. Un-gummed side remains clean.

Try a POTDEVIN on FREE TRIAL
Write for complete catalog

POTDEVIN MACHINE CO.
1208 38th St., Brooklyn 18, N. Y.

Designers and manufacturers since 1893 of equipment for Box Making, Printing, Coating, Gluing and Labeling.



2 Strips seal your
cartons stronger when you
use Angier's reinforced



For extra strength at lowest cost! Get the facts
about this reinforced, waterproofed sealing tape.

FREE SAMPLES!

WRITE TO *Angier* CORP., FRAMINGHAM 9, MASS.

If you want to keep up with
the best and latest ideas and
practice read

SHIPPING MANAGEMENT

12 monthly issues filled
with helpful, usable
information for

\$3.00 per year

ORDER TODAY!

New Improved Incline Impact Tester is Installed In N.J.

A new Incline Impact (Conbur) Testing device has just been completed at Package Research Laboratory, Rockaway, New Jersey. This new apparatus replaces one used in testing a great variety of packaged articles for the past 14 years. The original apparatus was one of the first ever used.

This new testing device accommodates loads up to 1,000 lbs. and packages 78 inches high or 76 inches wide. The "bumper" is constructed of steel channels, oak boards, and a steel face plate. The dolly, 60 x 72 inches, is faced with maple boards and is mounted on 6 roller bearing wheels which run on two steel tracks spaced approximately 33 inches apart. Although it is possible to release the dolly from as far as 13 feet from the bumper, a 5th zone shock is obtained from a run of only 28 inches. A 1,000 lb. hoist is located over the dolly to facilitate the handling of heavy loads for testing.



On the new Incline Impact Testing Device just completed, containers as wide as 76" can be released from as far as 13 feet from the steel and oak bumper.

One of the big advantages of the new testing device is that it is now a one-man operation. The dolly is provided with a latch to engage one of the many lugs on a central chain. When not engaged, the latch is held clear of the chain by a spring. The operator starts the chain at the beginning of a test and does not stop it until the test is completed. A release is positioned in the middle of the track to automatically disengage the latch when the dolly has reached a predetermined position.

The Incline Impact Tester is used for the prescribed test of the National Safe Transit Committee and is a standard of the American Society for Testing Materials and the Technical Association of the Pulp and Paper Industry.

The Director of Package Research Laboratory is Mr. Earl R. Stivers, long-time Secretary of Committee D-10 on shipping containers, ASTM; Director, Eastern Division Society Industrial Package and Mechanical

Handling Engineers; and a member of the Container Testing Committee of TAPPI.

The new Incline Impact Testing device was designed by Mr. E. H. Hewson, Assistant Director of Package Research Laboratory.

Shock Protection and Cushioning

(Continued from Page 15)

loads up to 70 pounds per square inch depending upon the density and the measured thickness.

There are, of course, other cushioning materials on the market including the old stand-bys, excelsior and shredded papers, all of which fill a definite need as a cushion material if properly used as such.

Then we come to popcorn. Perhaps to many of you this is a joke, introduced last year at Philadelphia, to annoy and aggravate you. I can assure you, however, that one industrial product concern is using it, in spite of a ruling against it by one of the Washington Bureaus. One of the trade papers picked this up and published a story as follows: "Dealers when they place an order for _____, simultaneously place an order for butter and salt. That's because _____ now packs its _____ in popcorn to cushion them on long trips. When the first shipments arrived, many dealers phoned the _____ office to thank them for the snack," etc., etc.

There is no question but that popcorn is light, is fairly cheap, and does have cushioning ability. But why pick on popcorn, why not puffed wheat or puffed rice? The point is that pop-corn is a good and somewhere along the line someone is going to nibble—if a human doesn't the rats and mice will. Then there is the question of high humidity and water. If the package gets wet, the corn cushioning will be effected. If the corn is treated to keep rats and mice away, or if the contents can affect the corn and someone eats it, sickness may result or even worse. It was for these reasons the health authorities ruled against it. Anything that is light enough to be cushioned by popcorn can be cushioned by other means just as cheaply and lightly and with the hazards removed.

Trucking Industry Growth

(Continued from Page 23)

knock out highway transport. Trucks can operate almost anywhere and are practically impervious to air attack and sabotage. Not only can we use quickly-installed pontoon bridges, but we can easily go around any knocked-out spot."

Because of the importance of trucking in both peace and war, Mr. Beardsley stressed, the public should turn its attention to "our highway system, which today constitutes a grave national problem."

Referring to President Truman's report to Congress in 1949, he said the report showed the main highway system is:



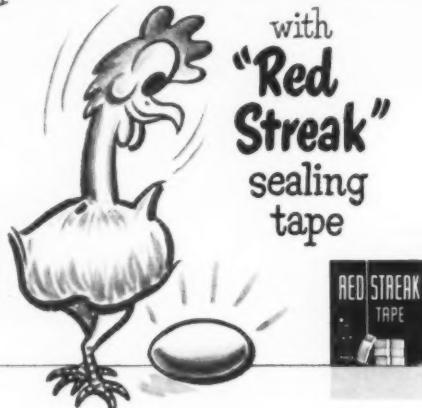
R.C.S. TOOL SALES CORPORATION
JOLIET, ILLINOIS, U.S.A.



Designed to a quality . . . not a price standard . . . Tru-Test actually provides better all-around results. It handles faster, sticks quicker, provides extra security. Carton packed too for convenience and protection in storage.

manufactured by
TAPE, INC. / Green Bay, Wis.
sold by better distributors everywhere
for better results anywhere

You too can deliver the goods



Red Streak Sealing Tape is strong
... keeps out dust, dirt and moisture. No other form of closure gives so much for so little.



Those Gummimg Specialists

The Brown-Bridge Mills, Inc., Troy, Ohio

Keep Incoming Shipments Straight!

General's
RECEIVING RECORD BOOK

Records.. Routes.. Checks
INCOMING SHIPMENTS

Avoid lost shipments, incomplete records, delayed production. Triplicate 150 sets per book. PINK copy notifies dept. of receipt of goods. YELLOW copy to bookkeeper, as invoice tally. WHITE copy remains in receiving dept. as permanent record. Duplicate (225's) ts. Each book Trial order on, your copy ready.



GENERAL ENVELOPE COMPANY
25 SOUTH STREET, BOX 654 • BOSTON 2, MASSACHUSETTS

MILITARY PACKAGING

We manufacture and distribute a complete line of materials for packaging under the following specifications

AN	JAN	MIL
BAGS & ROLLS	MIL-C-6056	AN-E-1b
Moisture-proof	UU-F-27a	AN-T-12a
Water-proof	100-14-A	AN-B-121
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Phone Orders	JAN-P-658	MIL-B-131-A
	AN-B-20	JAN-P-177
	AN-C-67b	MIL-E-6060
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PAPER PRODUCTS
CHARLES E. KING & CO.
SHIPPING MATERIALS

966 WEST CHICAGO AVE., CHICAGO 22, ILL. TELEPHONE Haymarket 1-0165

"Carrying 49 million vehicles today, while it bore only 34 million ten years ago;

"Wearing out physically both from use and from age;

"Narrow and winding in too many critical spots;

"Bottlenecked at many city approaches;

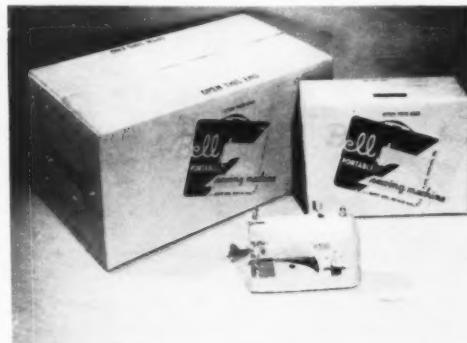
"Dangerous. In 1948 alone, 1,400 people lost their lives because of poor highway design or construction;

"Built wrong from a structural as well as a design viewpoint."

Summarizing the road problem, Mr. Beardsley said, "The vast agricultural and industrial interests will find their markets severely curtailed unless we squarely face the fact that many of our roads must be re-designed."

**Five Portable Sewing Machines
Compactly Shipped In Newly
Developed Master Container**

A new American made, portable electric sewing machine manufactured by I. J. Moritt Corp. of New York is packed in a printed container and master container made for them by the Robert Gair Company, Inc., manufacturers of folding cartons, paperboard and shipping containers.



Shown above are the new printed container and master container developed for the new portable sewing machine shown in the photograph. Five machines are packed ready to ship in the Master container.

The smaller container comprises a complete shipping unit; no repacking is required at retail stores. It also gives protection to the machine's fine leather, wood frame carrying case which doubles as a base when the machine is in use. Five packed sewing machines are inserted in a printed master container for shipment to stores.

Most steel rails after being rolled are placed in open top cars lined with rock wool so that their cooling can be controlled and then are subjected to a rigid inspection in order to make sure they are capable of doing the job for which they are intended.

The number of Class I truck lines—those with gross revenue of \$100,000 or more annually—has increased in one decade from 1,030 in 1938 to 2,500 last year.

"Listen, Mr. Traffic Manager"

(Continued from Page 17)

large and hence if shipped in units of over 2 must be rated as a separate package. Thus if a dealer ordered 3 of Item B it would be rated as two pieces one of 26 ounces, the other of 52. Many other variables enter into the picture when actually making up such a chart but we have presented at least the fundamentals.

At first glance it might seem a very lengthy procedure to ascertain the postage from such complicated charts. We have been working on just such a chart recently and found that after a day or so the procedure becomes almost automatic. We found that most of the weights are memorized quickly as well as postal rates and the rating time reduced to a matter of but few seconds. Certainly the labor saved in the accounting department is tremendous. As we have stated above, compiling such a chart is extremely difficult but once done it is a real timesaver.

Steel Strapping Equipment Solves a Packaging Problem

Transit damage to shipments of Smoothedge—a plywood product for the tackless installation of carpet—is practically eliminated and packaging time reduced over 45 pct. by the use of steelstrap equipment at the Los Angeles plant of the Roberts Company.

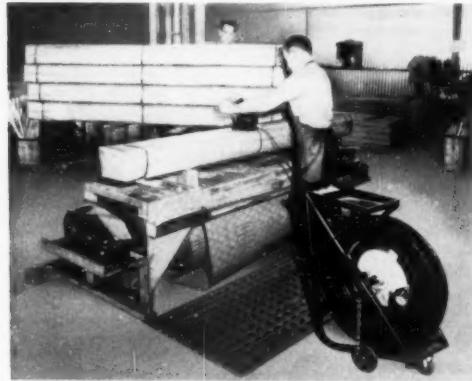


Photo and Data Courtesy Acme Steel Co.
Packaging time is reduced substantially and transit damage virtually eliminated when Smoothedge plywood carpet-installation strips are packaged with steelstrapping equipment.

Formerly, packages of 75 or 150 of these plywood strips were damaged in transit because of inferior bundling methods. These strips, 8 ft. long, $1\frac{1}{8}$ in. wide and $\frac{1}{4}$ in. thick, would often arrive at their destination with breaks in two or more places and with damaged ends.

Exhaustive tests revealed that the steel-strapping method was the only packaging technique that prevented bundle looseness and produced packages of sufficient strength to withstand transit abuses. Corrugated-paper packages securely bound with steel bands

(Continued on Page 34)

**"Boss,
this is
the best
Marker**

I've ever used"



Drawn with a
Flo-master

KING SIZE
 $8\frac{1}{4}$ in.

POCKET
SIZE $6\frac{1}{4}$ in.



It's no wonder that the Flo-master is the "Popular Choice" in shipping rooms from coast to coast. It's ideal for bold and fine marking of boxes, crates, bags, cartons. Interchangeable felt tips make lines varying in thickness from $\frac{1}{8}$ in. to 1 in. Spring valve permits finger tip control of ink flow. Lightweight but sturdy aluminum construction. "Pocket Size" for general use — "King Size" for heavy-duty marking. Used with Flo-master Inks—instant-drying, waterproof, non-smudging.

Ask your supplier or write to
Cushman & Denison Mfg. Co.,
153 W. 23rd St., N. Y., N. Y.

Cap of "King Size" may be screwed to beach to serve as stand.



Flo-master
FELT-TIP MARKER

**JUST PRESS
THE KEY and you
know the postage!**

DETECTO POST-O-METER

• Saves Postage —

The package weighed on this Parcel Post Scale will not carry too many — or too few — stamps.

• Saves Time —

Speeds mailing department flow. Ends weighing bottlenecks. Simply press the zone key. One figure shows the exact postage. No postage-due delays... ever!



DETECTO

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YOURS

For the Asking!

Each numbered paragraph below describes practical, illustrated literature about the newest developments in shipping room supplies, devices and equipment . . . important data **every** alert, progressive shipping manager should keep filed and available for instant reference. It will pay you to read each item carefully, select those that help with your particular shipping problems. Then all you need do is check and mail the coupon. Shipping Management will see that the material is forwarded with no obligation on your part.

PAPER SHREDDING . . . machine will produce ideal packing material for you in your own shop. Four ways to save space and money, assure supply. Complete details if you check 1.

GUMMED TAPES . . . Select your gummed tapes and specialties from a complete line. List and pertinent facts if you check 2.

HANDBOOK . . . for gummed tape users. Everything you'll ever want to know about gummed tape sealing problems. Free if you check 3.

NEW, MORE COVERAGE . . . in the 1950 Better Shipping Manual. Let us bill you for the latest edition of this encyclopedia of essential fact and information for the shipping room. Copy on approval if you check 4.

GUMMING SPECIALISTS . . . Good paper, good glue and plenty of it to insure a permanent closure. For details and sealing helps check 5.

PARCEL POST SCALE . . . Simply press the zone key. One figure shows the exact postage. Descriptive bulletins free, if you check 6.

EXTRA STRONG TAPE . . . at lowest cost. You can save seven ways with this reinforced, waterproofed sealing tape. Free samples if you check 7.

TAPE DISPENSERS . . . A complete line of precision built machines, pressure-sensitive, trouble-free, now available. No matter what your business may be there's a pressure-sensitive tape to suit your needs. For complete detailed information check 8.

SUPPLIES . . . Everything you need for packing and shipping operation and the well run shipping room plus many types of materials handling equipment. For catalog, check 9.

QUICK CALCULATOR . . . of cargo content. This all plastic calculator gives quick accurate cubic readings. Line up

length, width and height, scales and calculation is given in cubic feet. Prices, check 10.

QUALITY CONTROLLED . . . A quality controlled gummed sealing tape. From raw pulp to finished roll. For details check 11.

ANTI-CORROSIVE . . . and anti-rust papers, government specification packaging materials, barrier wraps, and specialty papers of all kinds available from our complete and versatile stock. [Full listing sent free if you check 12.

RECEIVING RECORDS KEPT . . . neatly and permanently in the receiving record book which records routes and checks incoming shipments. 150 triplicate sets per book. Check 13. 6

DIAL YOUR TAPE . . . In a split second this tape machine performs three important operations: measures the tape accurately, cuts off the tape clean, and moistens it with warm water. For free bulletin DT-1 check 14.

PRECISION SHIPPING . . . this railroad is equipped for heavier, longer hauls, smoother handling of shipments—dependable, on-time service between Texas, Oklahoma and the North. For info check 15.

TAPE MACHINE . . . Moisture is evenly distributed over your tape with this machine that does it automatically. For complete information on this and on tapes check 16.

STEEL STRAPPING . . . Makes packages firm, tight, and pilfer-proof. Ideal for palletizing. For free book simply check 17.

FREE PINT SAMPLE . . . of a new stencil ink that is really blacker, that needs no shaking, that's weatherproof and permanent, that won't harden brushes. Enough for 1,000 addresses, it's yours free if you check 18.

Check HELPS By Number—MAIL Today!

SHIPPING MANAGEMENT

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10/51

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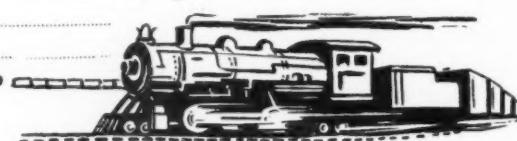
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PROTECTIVE PACKING . . . Any item subject to breakage or marring—from perfume bottles to polished metal parts—reaches its destination undamaged when cushioned with this extra soft, resilient material. For samples, free info, check 29.

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ELECTRICAL SAW . . . will uncrate your incoming merchandise faster than pulling nails, breaking wire, or strapping, at no damage to crates. Many other advantages listed if you check 31.

DESICCANT . . . for Method II dehydrated packaging, meets current military specifications at competitive prices. Available in all standard bag sizes, in bulk, or custom packaged. Price list and specification sheet sent to you at no cost if you simply check 32.

Packing A Punch

(Continued from Page 11)

virtually no effect on freight rates paid by shippers in the Eastern territory—the area east of the Mississippi and north of the Potomac and Ohio rivers. Similar uniform rates to apply to states west of the Rockies still are under ICC investigation.

Before the new rates go into effect, the railroads must submit within four months a uniform classification for all freight bearing class rates.

AUTOMATIC EQUIPMENT FOR PROCESSING AND OVERSEAS PACKING

A complete line of machines for processing and packaging, approved by Underwriters' Laboratories for safety, have been developed by D. C. Cooper Company. Included in the line are automatic machines for automatic cleaning of metals, fingerprint removing and dipping of spare parts in rust preventives.

Send for new literature illustrating and describing the equipment.

LOW COST CORRUGATION

Developed specifically for shipping departments who use corrugated board as a separator, liner, or cushioning for fragile items, Shelton Manufacturing Company's new "Shelliner" provides maximum protection at less cost than regular corrugated materials. This new material has no lining, yet permanently retains its corrugation characteristics.

Shelton claims their "Shelliner" can be used in place of lined corrugation and is extremely cheap to produce. Shippers

can use "Shelliner" as a freight car liner and be assured of the same protection they get from other type corrugation.

As an example one roll of 48" can line the walls of a 40 foot car. Packaged in stock rolls of 12", 18", 24" and 36", 250 feet to the roll, it can be run to specification up to 72" in width. Also available in sheets cut to size.

METAL WORK BENCH

The new Natkin-Built "Scotty" Work Bench is currently being offered through jobbers. It is all steel construction with a "Nat-Flex" top . . . an exclusive feature. The same bench is also available with a heavy steel bench top.

Until recently, Natkin limited their production to benches, service merchandisers and other metal units designed especially for the automotive industry. This is the first of a line of benches, tote-tables, etc., which the Natkin firm is developing for industry in general.

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INDEX TO ADVERTISERS

Angier Corporation.....	28
Atlantic Gummmed Paper Corp.	10
Better Packages, Inc.	Back Cover
Brown-Bridge Mills, Inc.	30
Cushman & Denison Mfg. Co.	31
Culligan Zeolite Co.	6
Derby Sealers, Inc.	25
Detecto Scales, Inc.	31
General Envelope Co.	30
Gerrard Steel Strapping Co.	10
Glue-Fast Equipment Co.	26
Gummmed Products Co., The	9
Hanline & Sons, Frank.	27
Hansen Mfg. Co., A. L.	26
Hudson Pulp & Paper Corp.	5
Industrial Shredder & Cutter Co.	27
King and Co., Charles E.	30
Leonard & Co., G. R.	4
Marsh Stencil Machine Co.	7
Minnesota Mining & Mfg. Co.	35
Missouri-Kansas-Texas	3
Nashua Packing Sealing Co., Inc.	2
Pitney-Bowes, Inc.	12
Potdevin Machine Co.	28
R. C. S. Tool Sales Corp.	29
Rexford Paper Co.	33
Tape, Inc.	29
Traffic Managers Institute	33
Union Wadding Co.	24

Steel Strapping Equipment

(Continued from Page 31)

now provide virtually 100 pct. protection to the Smooth-edge strips during transit.

To put the improved packaging system into effect, a Steelstrapping machine and related equipment was installed in the Roberts Company shipping department. This machine quickly applies three $\frac{3}{4}$ -in. steelstrap bands across the widths of the corrugated-wrapped packages—one 8 in. from each end and a third in the middle of the package.

Strapping is fed from a coil, tensioned around the package, crimp-sealed, and cut to proper length with two opposing strokes of the machine. The strapping does not nick or indent the product. The only limitation to the operation of this machine is the requirement of a minimum 6-in. flat operating surface.

The magazine of the steel strapper holds 100 seals. These are automatically fed as needed to the sealing device. Smooth operation during tensioning operations is provided by the continuous take-up mechanism. To facilitate handling, the machine can be attached to a universal tool mount.

The $\frac{3}{4}$ -in. strapping is available in coils having an inside diameter of 16 in., an outside diameter of 22 in., and is fed to the machine from a portable reel stand. This 33-lb. stand uses a V-belt brake to accurately control strap feeding and is only 32 in. high, 27 in. long and 17 in. wide.

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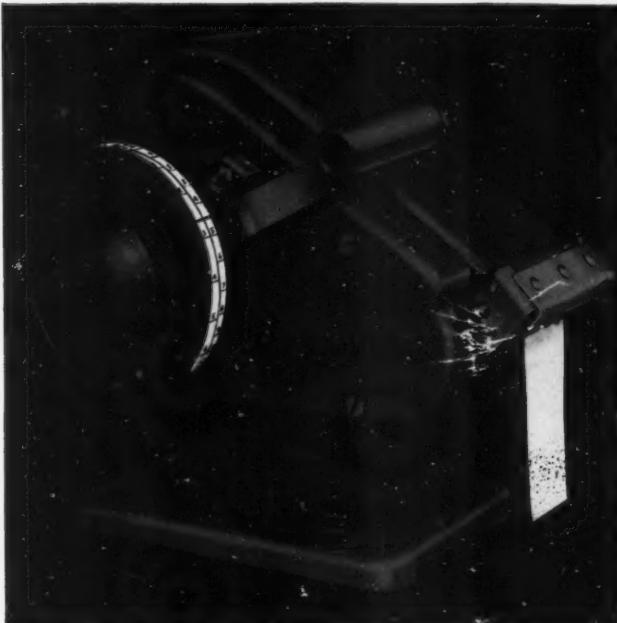
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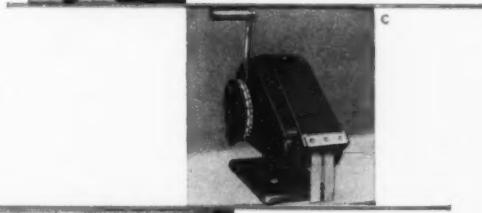
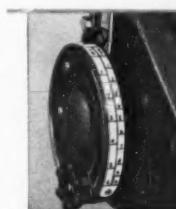
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